Identification of Moves Structure in the Discussion Section of Social Sciences Doctoral Research Thesis

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Identification of Moves Structure in the Discussion Section of Social Sciences Doctoral Research Thesis

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ABSTRACT

This study describes the move structure of sub-genre; the discussion part in the doctoral theses of Pakistani research scholars. The study embraces six disciplines of social sciences, i.e. Education, Economics, Geography, Sociology, Statistics and Psychology. Thirty doctoral theses have been retrieved from Higher Education Commission (HEC) Pakistan Research Repository. Total data consist of 18, 80, 566 words approximately. The textual data of the discussion part of doctoral research thesis are analyzed in terms of the analysis of Peacock (2002) model which is the modified version of Dudley Evans (1994) move analysis. It is quite similar to Dudley's model, but in addition to the 9 moves, move cycle is also proposed by Peacock. Not even a single obligatory move is found in selected theses which reveal that the rhetorical pattern of Pakistani PhD scholars does not match with this model of move structure. Contrary to move structure, move cycles proposed by Peacock (2002) are largely established in those research thesis. This study may be beneficial for PhD supervisors and research scholars to construct the relevant part with proper move structure for effective writing.

Introduction

In the sub-field of English for specific purposes (ESP), English for Academic purposes (EAP), genre studies have been much focused upon for pedagogical implications. Researchers have been trying to highlight the generic and rhetorical features of academic texts. Many studies have been conducted to describe the structure of research articles (RA) but there has been little investigation of research thesis structures. Number of students specifically second language learners face

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problems regarding the structure of thesis writing, particularly in the field of social sciences. So it is necessary to identify the move structure in each part of research thesis to have the idea about their rhetorical structure.

Literature review

Over the past few years the sub-genre of research articles, the discussion section has gained significant relevance for ESP practitioners for pedagogical implications. In the discipline of physical sciences, the discussion section is largely argumentative and factual (Williams 2007). In social sciences, the composition of this sub-genre is difficult as it has more theoretical dimensions than Science discipline. The scope of research in the field of Social Sciences has been increased potentially but the researchers and students in this field face numerous obstacles to construct a fruitful research (Liming 2009). Therefore, it is needed to provide them proper guidance regarding the construction of research articles or research thesis. Especially second language learners have to pay extreme attention in this regard. They need to know where to start the discussion and where it is concluded. What is the necessary information, a research article or research thesis must contain. In ESP terminology, it is referred as obligatory and optional moves (Peacock 2002). Besides obligatory and optional moves, the third type, i.e. conventional move is also found (Salmani 2009). Not only students, teachers may also need to make their students follow a systematic way of writing dissertations or articles.

According to Basturkmen (2012), 'number of studies have been done on the critical analysis of the discussion section. Few of them are; Biomedicine (Dubois 1997), Chemical Engineering (Peng 1987) and Social Sciences (Lewin et al. 2001). Although the studies show different numbers and kinds of moves in the different disciplines, writers such as Dubois (1997) and Lewin et al. (2001) suggest that this may be due not to the different disciplines subject to investigation, but to different methods and definitions used by the researchers. Research studies in general have described the discussion section as characterized by the presence of repeated cycles of moves (Basturkmen 2009; Holmes 1997; Peacock 2002; Swales 1990; Peng 1987; Yang and Allison 2003) and move cycles as being organized around the findings to research questions (Basturkmen 2009; Dubois 1997; Hopkins & Evans 1988; Kanoksilapatham 2003).

This area of research has been explored mainly in the natural science disciplines. There is a limitation in the exploration of moves in Social Science Discipline (Liming 2009). Therefore, it is lacking area, which supports the present research to conduct a thorough study in the discipline of Social Science. Besides research articles, research thesis move structure is also important to study with reference to Doctoral thesis as the particular degree demands an intense attention to pursue the structure.

According to Peacock (2002), 'A number of authors have proposed models for the move sequence in RA discussion sections since Adams Smith (1984) examined six medical RAs and reported the structure explain method, interpreted results, referred to literature an implications.

Hopkins and Evans (1988) suggest there is only one obligatory move, statement of the result, and an 11-move sequence background information, statement of result, (un)expected

outcome, reference to previous research, explanation of unexpected results, exemplification, deduction, hypothesis, recommendation, justification. Swales (1990) suggests a list of eight moves as ''a useful provisional framework'': background information, statement of results, (un)expected outcome), exemplification, deduction and hypothesis, recommendation. He also says ''the existence of [move] cycles seems well-established''. Swales and Feak (1994) noted 'while discussion sections vary considerably, they normally contain three moves: consolidate research space, limitations, further research. They also say that move 1 is usually quite extensive and moves 2 and 3 quite short, and that many discussion sections run through the 1–2–3 sequence more than once. They make the useful point that results sections deal with descriptive facts, and discussion sections with interpretative points.

      The present research will make the scope broad in this research area by adding the contribution from Pakistani researchers of Social Sciences. Moreover, it will open new horizons for future research in EAP and provide guidance for future researchers with specific reference to pedagogical implications.

Problem statement

The research focuses on the analysis of rhetorical pattern of discussion part in the doctoral theses. It will examine the discussion part of Social Science doctoral theses in terms of the analysis of Peacock (2002) which is the modified version of Dudley Evans (1994). It is almost similar to Dudley's model, but in addition to the 9 moves, move cycle is also given by him. Though that research has been done on the discussion part of RA, but as it is a comprehensive model so it has been adopted for the analysis of this research thesis's discussion part also. Moreover, it will also suggest the obligatory and optional moves in the relevant part of the discussion.

Objectives

This study aims to:

        Find out the rhetorical pattern (according to the Dudley's model and Matthew Peacock model (2002) of move analysis of the doctoral thesis of Pakistani social science students to explore the obligatory and optional moves for pedagogical implications.

Research questions

1- Is Peacock (2002) model of moves and moves cycle for the discussion part of RA is applicable for the discussion part of the doctoral thesis of Pakistani Social Science students as well?

2- To what extent Peacock's (2002) model is applied on the Pakistani students' doctoral thesis?

3- What are the obligatory and optional moves in the discussion part of the doctoral thesis?

Methodology

Thirty social science doctoral theses across six disciplines of past five to seven years (2007-2013) have been collected from HEC Pakistan repository, i.e. five each in the field of, Education, Economics, Psychology, Geography, Statistics and History. Total data consist of 18, 80, 566 words. The samples are chosen according to the redefined criterion. Each discussion part must have Quantitative and Qualitative method of analysis. The social science discipline has been chosen for the reason that the most of the tudents have problems in this section as it is a detailed one section among all. Contrary to Physical Sciences, it is not fully dependent on empirical data, rather it has the detailed description regarding justifying the data. In Pakistan, there is no any study found in this discipline, particularly on the discussion part for teaching purposes. Moreover, research in the discipline of Social Sciences has gained attention in recent times for Pakistan researchers therefore there must be a uniform structure to be followed for a beneficial research. Only description section of discussion part has been chosen for the application of moves excluding the tables and figures. The application of moves and move cycle is done by Matthew Peacock' pattern so the moves are classified as follows;

- o Looking into the pattern and organization of the text.
- o Identifying moves according to text comprehension.
- o Analyzing moves on the sentence level.
- o Examining the obligatory and optional moves.

Two human coders have tagged all text files according to Peacock (2002) model. Further, the moves and moves cycle in the discussion part of doctoral thesis have been analyzed through automation as well to make the results more consistent. The Antmover 1.0 version has been used for the purpose of computerized analysis.

Table 1. Description of two models selected for application on social sciences doctoral thesis

Moves	Dudley moves model	Peacock moves model		Introduction
M1	Information move	Information move (background on theory/research aims/methodology)		Move
			Moves cycle;	1
M2	Statement of result	Finding		Or
M3	Finding	Expected or unexpected outcome (comment on whether the result is expected	**Three**	2
			Part	Or
			Frame	6
		or not)		

M4	(Un)expected outcome	Reference to previous research	**work given**	**Evaluation**
M5	Reference to previous research	Explanation (reasons for expected or unexpected results)	**By** **Peacock**	Moves 2+4 Or 2+6
M6	Explanation	Claim [contribution to research (sometimes with recommendations for action)]		Or 3+4 Or 3+5 Less frequent 6+4 4+6
M7	Claim	Limitation		**Conclusion**
M8	Limitation	Recommendation (suggestions for future research)		Moves 2+6
M9	Recommendation	N/A		Or 8 Or 8+6 Or 7+6

Table 2. Frequency of individual moves appeared in all doctoral thesis

No.	Moves	Percentage Present in Research Thesis	
M1	Information move	46 %	(14 out of 30)
M2	Statement of result	53 %	(16 out of 30)
M3	Finding	66 %	(20 out of 30)
M4	(Un)expected outcome	30 %	(9 out of 30)
M5	Reference to previous research	56 %	(17 out of 30)
M6	Explanation	60 %	(18 out of 30)
M7	Claim	43 %	(13 out of 30)
M8	Limitation	56 %	(17 out of 30)
M9	Recommendation	66 %	(20 out of 30)

Analysis

As it is described earlier that the purpose of the study is to examine the rhetorical structure of discussion part of the research thesis, so for this reason, all text files are examined to find out the move structure. The frequencies of moves have been found to observe the occurrence of each

individual moves. The rhetorical pattern is examined in line with the model of Evans (1994). It is noted that there is no any obligatory move found an all moves are present on the specific percentage level. Two moves are most frequent, i.e. move 3; findings and move 9 having 66 %; recommendation. After those moves, move 6; explanation occurs significantly having 60 % .Then move 5; reference to previous research and move 8; limitation are having 56%. The least occurring move is move 4; (Un)expected outcome.

For the purpose of detailed analysis, each file of each discipline has been analyzed textually manually as well. And to see the inter-rater validity an external expert opinion has been taken. There are some disagreements regarding assigning the moves, but after long discussion these disagreement firstly resolved. Moreover, this data was put forward to automation as well for computerized analysis. The Antmover 1.0 version has been used for automation.

Moves cycles

Matthew Peacock has modified the Dudley Evans (1986) model of sub-genre of research articles' discussion part by adding some moves cycles. As Dudley (1986) also suggested that discussion part has the cyclic structure of the rhetorical pattern, but he has not given moves under this cyclic structure. According to this version the selected Social Sciences research thesis largely i.e. above 90% follows this rhetorical pattern. Fundamentally, it has three major parts; introduction, evaluation and conclusion. As shown in the Table given below:

Table 3. Application of move cycles proposed by matthew peacock (2002) on the social sciences doctoral thesis

Moves Cycle	Matthew Peacock moves model(2002)	Edu RT	Eco RT	Psy RT	Geo RT	Socio RT	Stat RT
Introduction	Move 1 Or 2 Or 6	P	P	P	P	P	P
Evaluation	Moves 2+4 Or 2+6 Or 3+4 Or 3+5 Less frequent 6+4 4+6	P	P	P	P	P	P
Conclusion	Moves 2+6 Or 8 Or 8+6 Or 7+6	P	P	P	P	P	P

All six disciplines of Social Sciences i.e. Economics, Education, Psychology, Geography, Sociology and Statistics follow these moves cycles as in this way there are broad options for researchers to write down this detailed session following the rhetorical pattern of moves cycles.

Conclusion

It is concluded from the analysis that the doctoral thesis of Pakistani Social Science students of six mentioned disciplines have their own rhetorical structure of dissertation writing which does not match with the selected moves structure of Dudley Evans model rather it matches with the second selected model of moves cycles of Matthew Peacock (2002). There is no any obligatory move found and all moves are optional. This research may have a substantial contribution for ESP and EAP practitioners in academic writing. Moreover, it will be beneficial for the students and teachers of relevant community to focus on move structure of dissertation writing and produce valuable pieces of writing.

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Appendix A

Table 1.1

Moves	Dudley moves model	Eco 1	Eco 2	Eco 3	Eco 4	Eco 5
M1	information move	A	A	P	P	P
M2	statement of result	P	A	P	A	A
M3	Finding	P	P	A	P	A
M4	(un)expected outcome	A	A	P	P	P
M5	reference to previous research	P	P	P	A	A
M6	explanation	A	A	P	A	P
M7	Claim	A	A	A	P	P
M8	limitation	P	P	A	A	A
M9	recommendation	A	P	A	P	A

Table 1.2

Moves	Dudley moves model	Socio 1	Socio 2	Socio 3	Socio 4	Socio 5
M1	information move	A	P	A	P	A
M2	statement of result	P	P	P	A	A
M3	Finding	P	P	A	A	P
M4	(un)expected outcome	P	A	A	A	A
M5	reference to previous research	P	P	P	A	A
M6	explanation	A	A	P	P	P
M7	Claim	A	P	P	P	P
M8	limitation	P	A	P	P	P
M9	recommendation	P	A	A	P	A

Table 1.3

Moves	Dudley moves model	Geo 1	Geo 2	Geo 3	Geo 4	Geo 5
M1	information move	P	P	P	A	A
M2	statement of result	A	P	P	A	A
M3	Finding	P	P	P	A	A
M4	(un)expected outcome	A	A	A	P	P
M5	reference to previous research	P	P	A	P	A
M6	explanation	P	P	P	A	P
M7	Claim	A	P	A	A	A
M8	limitation	P	A	P	P	A
M9	recommendation	P	P	P	P	P

Table 1.4

Moves	Dudley moves model	Psy 1	Psy 2	Psy 3	Psy 4	Psy 5
M1	information move	A	P	A	P	A
M2	statement of result	P	P	P	A	A
M3	Finding	P	P	A	A	P
M4	(un)expected outcome	P	A	A	A	A
M5	reference to previous research	P	P	A	P	A
M6	explanation	P	P	P	A	P
M7	Claim	A	P	A	A	A
M8	limitation	P	A	P	P	A
M9	recommendation	P	P	P	P	P

Table 1.5

Moves	Dudley moves model	Stat 1	Stat 2	Stat 3	Stat 4	Stat 5
M1	information move	P	A	P	A	A
M2	statement of result	P	A	A	P	P
M3	Finding	P	P	A	P	P
M4	(un)expected outcome	A	A	P	A	A
M5	reference to previous research	A	A	P	P	P
M6	explanation	A	A	P	A	A
M7	Claim	P	P	A	P	A
M8	limitation	A	A	P	P	P
M9	recommendation	P	P	P	A	A